

A Note on the Decrease of the Carolina Wren near Washington.—

The winter of 1917-1918 in the vicinity of Washington, D. C., with its prolonged cold and unusual fall of snow, was a severe one for many birds, a fact that was manifested especially in the case of the Carolina Wren (*Thryothorus l. ludovicianus*). Near Washington Carolina Wrens increased steadily in numbers in the period extending from 1912 to 1917, and during the last two years of this time were common. Their abundance at Plummer's Island, Maryland, was noticeable, and birds were seen or heard on practically every visit to that vicinity. Through December, 1917, and January, 1918 they remained in their usual numbers. February 1, during a visit made to Plummers' Island immediately after a heavy snowfall I found that the snow in the woods where it had not been drifted was sixteen inches deep. Several Carolina Wrens were seen on this day. One was observed climbing up the trunk of a red birch, where the bird broke open the curling rolls of bark, in search for food, making a rattling, rustling noise audible for some distance. Another was clambering about the eaves of the cabin. Both of these feeding habits were more or less unusual. This heavy snow covered the ground for a considerable period after this and must have rendered food difficult to find. Immediately after February 1 the Carolina Wrens in the area under consideration disappeared, and the supposition was that the greater part of them had perished. Only three or four pairs were known to remain in the region between the end of the carline at Cabin John's Bridge and Plummer's Island, while none were left on the island property. The same decrease in number among these birds was observed throughout the entire Washington region and when spring opened it was found that there were only scattered pairs in a few areas.

In a former note (published in 'The Condor,' 1913, pp. 120-121) I have called attention to a similar occurrence in eastern Kansas, where other species of birds in addition to Carolina Wrens were concerned. These observations and others of a similar nature seem to show that the Carolina Wren is a bird that may be considered resident in the strictest sense of the word in regions where it is found. In many so-called resident species, though the species as a whole is represented at all seasons individuals are migratory and perform regular journeys each year. With the Carolina Wren however, this does not seem to be true, as adult individuals (in pairs) frequent certain restricted areas throughout the year without reference to season. The immature birds that have not yet become settled, wander somewhat during spring and fall, and individuals may occur at this time in cities or elsewhere outside of their normal haunts. These movements however, are irregular, and seem at most to be restricted to short distances when compared with the regular spring and fall movement found among other birds of recognized migratory habits. It is by these restricted movements that these Wrens extend their local range.

At Plummer's Island one of these wanderers visited the island and adjacent parts of the mainland on April 7 and worked restlessly about, singing loudly. No others were observed during the spring and summer

months and the species did not occur again until December 8 when one was observed skulking in a brush pile below the cabin. One bird (presumably the same one) is still present on the island at present writing (January 12, 1919).

The instances given here are indications of the conditions limiting the range of the Carolina Wren, in one direction at least and show, too, how readily a species apparently common may be reduced or even exterminated in a given region in a very short period of time. In the case of the Carolina Wren the heavy blanket of snow covering the food supply would seem to be the direct cause of extermination rather than prolonged cold, as here at Washington these birds were able to survive a low temperature for a considerable period but were killed when deep snow covered the greater part of their normal feeding ground. It is to the comparatively few that are able to survive that we must look for the perpetuation of the species. The increase in numbers however, seems to be a slow process, as following their decrease in 1912, I found the species still comparatively rare near Lawrence, Kansas, in 1914, 1916 and as late as November, 1918.—ALEXANDER WETMORE, *Biological Survey, Washington, D. C.*

The Affinities of *Chamathlypis*.—As generic distinctions become more and more refined the need of a supergeneric group intermediate between the family or subfamily and the genus, corresponding approximately to the former genus, becomes increasingly evident.

In his great work on the 'Birds of North and Middle America' Mr. Ridgway has supplied this want in many families. In the Warblers (Mniotiltidae) the grouping does not appear to be so successful as in most cases. Not only is the old genus *Geothlypis* broken up into three genera but these are distributed in as many supergeneric groups. *Oporornis* is banded with *Dendroica* and its allies in the Dendroiceæ, while *Chamathlypis* is placed in the Ieteriæ.

We cannot help feeling that this arrangement is artificial, and that too much importance has been placed on the length of the wing-tip (easily modified by habits and migration), and insufficient weight given to coloration, nesting and even song.

Also, the distinctions are partially invalidated by exceptions. Thus the sections including *Geothlypis* and *Chamathlypis* are separated by differences in the length of the tail and form of the bill; but *Geothlypis nelsoni* agrees with *Chamathlypis* in having the tail longer than the wing. Again the Geothlypeæ are separated from the Dendroiceæ by having the rictal bristles obsolete and the wing-tip shorter, but in *Geothlypis æquinoctialis* and *G. cucullata*, at least, the rictal bristles are well-developed.

The particular point of criticism is in regard to the affinities of *Chamathlypis* which is distinguished from *Geothlypis* by its stouter bill, with strongly curved culmen, and its longer, graduated tail.

Mr. Ridgway expresses the opinion that while "this genus is very much like *Geothlypis* as to its general appearance" it is "quite distinct struc-